

# **WINCO**<sup>®</sup>

Quality Generators Since 1927

# **WINPOWER**

**Built Stronger To Last Longer**

## **Distributor/Dealer Catalog**

**Effective January 1, 2012**



[www.wincogen.com](http://www.wincogen.com)  
[www.winpowerinc.com](http://www.winpowerinc.com)

# Table of Contents

Vehicle Mounted Generators	2	Air-Cooled Automatic Standbys	8
Two-Bearing Generators	3	Liquid-Cooled Automatic Standbys	10
Industrial Portable Generators	4	Automatic Transfer Switches	12
Tri-Fuel Portable Generators	6	Mobile Diesel Generators	13
Dyna Portable Generators	7	Power Take-Off (PTO) Generators	14

All specifications are subject to change at any time without notice.

Every home and business depends on electricity to function safely and efficiently. When electricity is unavailable for any reason the safety and financial consequences for both homeowners and businesses can be devastating. WINCO and WINPOWER manufacture a broad line of generators to deliver electricity for almost any application.

Every WINCO and WINPOWER product is built in Le Center, Minnesota, in a 200,000 square foot manufacturing facility. From start to finish engineers and detail oriented fabricators and assemblers ensure that every product comes off the production line meeting the highest quality and finish standards. Many of the production personnel have years of experience that provides invaluable skills that contributes to superior quality. Every generator that we sell, whether a two-bearing or a large diesel set is 100% load tested instead of relying on random sampling.

At WINCO and WINPOWER we believe you deserve the best products at the best value while benefiting from great customer service. That is why our team works hard every day to ensure that we are here when you need us with the products that will provide the best long-term value.

## Emergen-C Series Vehicle Mounted Generators

WINCO vehicle mounted generators are built in the United States to exceed the requirements of the most demanding applications. Professionals trust the name that has been building generators to a higher standard since 1927.

### PTO Generators

- Made In USA
- 100% Copper Windings
- 25kw Versions AVR
- 35-75 kw buck boost transformer regulated for superior motor starting

- Durable bar and ring or cast shells
- Quality design provides exceptionally long life.
- Available with optional meter package

### Diesel Generator

- Air-Cooled Diesel Power
- Remote Start
- Low Oil/High Temp Shutdown
- Electric Start
- Fuel Filter & Pump Included

ECV2510/12

35-75PSB

EC6010DR

	ECV2510FPTOU-3		75PSB4G-4		EC6010DR	
Electrical Data	ECV2512FPTOU-3	35PSB4G-3	45PSB4G-17	55PSB4G-3	75PSB4G-17	*Diesel*
Max Power Rating	25/25 kw	35 kw	45 kw	55 kw	75 kw	6 kw
Cont. Power Rating (1)(2)	20/20 kw	35 kw	45 kw	55 kw	75 kw	5.5 kw
Voltage (3)	120/240	120/240	120/240	120/240	208(7)/240	120/240
Phase	1-PH	1-PH	3-PH	1-PH	3-ph	1-PH
Max Current	104A	146A	108A	229A	208/180A	-
Cont. Current (1)(2)	83A	146A	108A	229A	208/180A	45.8/22.9
Motor Starting (4)	7.5 hp	20 hp	30 hp	30 hp	40 hp	3 hp
Generator Rotor Speed	3600 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	3600 rpm
Conduit MTG.KO(s) Size/Qty	1 1/4" (1)	2" (2), 1/2" (2)	2" (2), 1/2" (2)	2" (2), 1/2" (2)	2" (2), 1/2" (2)	-
Conductor Size (Qty)	#10 (6) Pwr-36" #4 (1) Grnd-36"	None	None	None	None	-
Input HP	50	65	80	95	125	10.5
Input Drive Speed (RPM)	1000/1181	1800	1800	1800	1800	3600
Input Shaft Size	1 1/8" Keyed	1 5/8" Keyed	1 5/8" Keyed	1 5/8" Keyed	1 5/8" Keyed	-
Input Rotation/Direction	Gear/Either	Direct/Either	Direct/Either	Direct/Either	Direct/Either	-
LxWxH	26.4"x19.4"x12.3"	28.7"x19.2"x16.4"	28.7"x19.2"	34.8"x19.2"x16.4"	34.8"x19.2"x16.4"	26.5"x21.5"x18"
Net Weight	287/275 lbs	416 lbs	420 lbs	598 lbs	605 lbs	-
Shipping Weight	318/306 lbs	436 lbs	440 lbs	618 lbs	638 lbs	245 lbs
Warranty Information	1 yr	1 yr	1 yr	1 yr	1 yr	1 yr

Notes: (1) Continuous rating per NEMA MG1-22.40 (2) Unity (1.0) power factor (3) +/-7% (4) NEMA Code G capacitor start motor (5) For full rated output. (6) EC6010DR is powered by an air-cooled Hatz diesel engine. (7) Contact WINCO service department before ordering.



# Stamford 2-Bearing Generator

## Irrigation and Industrial Applications

### Features and Benefits

- 1800 RPM Operation
- Keyed Shaft
- +/-1% Voltage Regulation
- Electronic Automatic Voltage Regulator (AVR)
- Excitation Boost System (EBS) Standard Withstands 300% Short Circuit
- 12 Lead Reconnectable (Ships in 480V Configuration)
- Clean Power, <5% Total Harmonic Distortion

MODEL	IRRIGATION WATTS	120/240V 1-PH DBL DELTA	120/208V 3-PH 120/240V 3-PH	277/480 3-PH	INPUT RPM	SHAFT DIAMETER	WEIGHT
PI044H2	8.5 kW	13.9 kW	16.6 kW	17.7 kW	1800 rpm	42 mm	261 lbs
PI144D2	10.0 kW	14.3 kW	19.0 kW	21.0 kW	1800 rpm	42 mm	291 lbs
PI144E2	12.5 kW	17.8 kW	23.7 kW	25.2 kW	1800 rpm	42 mm	323 lbs
PI144F2	15.0 kW	19.7 kW	26.1 kW	27.8 kW	1800 rpm	42 mm	332 lbs
PI144G2	17.5 kW	21.4 kW	28.4 kW	31.5 kW	1800 rpm	42 mm	368 lbs
PI144J2	20.0 kW	28.5 kW	38.7 kW	39.9 kW	1800 rpm	42 mm	441 lbs
PI144K2	25.0 kW	36.2 kW	42.5 kW	46.2 kW	1800 rpm	42 mm	461 lbs

Notes: (1) Motor starting based upon 1 kW = 1 HP motor starting for 480V 3-PH (2) All models include the EBS standard (3) All models are 12-Lead reconnectable (4) Most units drop ship from Stamford. Contact factory for availability.

## Two-Bearing Generators

There is no question that WINCO's two-bearing generators are the most rugged generators on the market. Epoxy baked rotors, oversized diodes, cast iron drive-side end brackets, and double sealed permanent bearings all combine to ensure maximum performance and life. Units are designed to rotate in either direction without rewiring making them very flexible for any application. Each generator is rated at unity power factor, requiring approximately two horse power of input for each 1,000 watts of output from the generator. Each unit is 100% factory tested instead of statistical sampling to ensure performance and reliability.



MODEL	2FSM2PC-1	8KS2GC-3 (1)	TB2400C	TB4000C (2)	TB6000C (2)	TB7200GFI (2)
Watts	2000 (3)	8000	2400	4000 (3)	6000	7200
Amps	16.7	66.6/33.3	20	33.3/16.6	50/25	60/30
Volts (60 HZ)	120	120/240	120	120/240	120/240	120/240
Rotor Speed	3600 rpm	3600 rpm	3600 rpm	3600 rpm	3600 rpm	3600 rpm
Motor Starting	.5 hp	3 hp	.75 hp	1.5 hp	3 hp	5 hp
Generator Type	Brush	Brush	Brushless	Brushless	Brushless	Brushless
<b>Receptacles</b>						
120V NEMA 5-15R	2	2	-	-	-	-
120V NEMA 5-20R	-	-	2	4	4	-
120V NEMA L5-15R	-	-	-	-	-	4
240V NEMA 6-15R	-	2	-	-	-	-
240V NEMA 6-50R	-	1	-	-	-	-
120/240V NEMA L14-30R	-	-	-	1	1	1
Circuit Breakers	UL Only	-	Included	Included	Included	Included
Length	15"	19"	14.25"	17.75"	17.75"	15.13"
Width	6.5"	12"	8.5"	8.5"	8.5"	8.5"
Height	6.75"	17.75"	8.94"	8.94"	8.94"	8.94"
Shaft Diameter	.625"	1.25"	1.125"	1.125"	1.125"	1.125"
Weight	56 lbs	175 lbs	61 lbs	67 lbs	86 lbs	67 lbs
Warranty (4)	1 yr	1 yr	1 yr	1 yr	1 yr	1 yr

Notes: (1) AC voltmeter included standard (2) Unit can be reconnected for 120 volt full power (3) Available in a UL version. Specify UL when ordering.

# Winco Industrial Portable Generators

Many industrial generators are industrial in name only. WINCO's industrial line sets itself apart by using the best components along with the best manufacturing processes. Each generator is inspected and tested at 100% load instead of statistical sampling to ensure each piece of equipment meets our high performance standards. WINCO is located in Le Center, Minnesota, and we maintain complete control over all manufacturing processes since we don't out-source our production. Our attention to detail translates into superior value for our customers.

## Engine Features

- Premium Honda, Hatz and Briggs & Stratton commercial engines
- Carb/EPA approved
- Cast iron sleeves
- Overhead valves
- 3 year commercial warranty (2 yrs Hatz)
- Fuel efficient
- Mechanical decompression for easy starting
- Low oil shutdown
- Muffler and engine designs reduce noise
- Service parts are widely available from multiple vendors

## Other Features

- 100% copper windings
- High motor starting capabilities
- Rubber isolation mounts
- Corrosion free fuel tanks
- Powder coat paint
- Generous receptacle packages
- Dolly kits, covers, lifting bars and other accessories are available (Page 7)



## MADE IN THE USA

	W3000H	WT3000H	WC5000H	WC6000H WC6000HE	WC10000VE Big Dog	WL12000HE Big Dog	WL18000VE Big Dog	W6010DEX ***Diesel***
<b>Electrical Data</b>								
Max Watts	3000	3000	5000	6000	10500	12000	18000	6000
Cont. Watts	2400	2500	4500	5500	9600	10800	15000	5500
Output (V)	120	120	120/240	120/240	120/240	120/240	120/240	120/240
Cont. Amps	20	20.8	37.5/18.8	45.8/22.9	80/40	90/45	125/62.5	45.8/22.9
Motor Starting (1)	.75 hp	1 hp	1.5 hp	3 hp	5 hp (5)	6 hp (5)	7.5 hp (5)	3 hp
120V Full Power (2)	-	-	37.5	45.8	-	-	-	45.8
Generator Type	Brushless			Brush	Brushless			
<b>Engine Data</b>	<b>Honda (GC)</b>	<b>Honda GX</b>			<b>B&amp;S (OHV)</b>	<b>Honda GX</b>	<b>B&amp;S (OHV)</b>	<b>Hatz (OHV)</b>
Model	GC160	GX160	GX270	GX340	Vanguard	GX630	Vanguard	1B40
Displacement	160 cc	160 cc	270 cc	337 cc	570 cc	688 cc	895 cc	462 cc
Conserv-R	-	-	Standard	Standard	Standard	-	-	-
Low Oil Shutdown	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Starting System (3)	Recoil Only			Rec/Elec		Electric Only		Rec/Elec
Fuel Tank (gal)	2 Qt.	1	4.5	4.5	7	15	15	7
<b>Running Time</b>								
Full Load	1.1 hrs	2.2 hrs	6.6 hrs	5.2 hrs	hrs	9 hrs	6.8 hrs	10 hrs
Half Load	1.5 hrs	3.1 hrs	10.3 hrs	9.8 hrs	hrs	14.5 hrs	10.5 hrs	20 hrs
Hour Meter	-	-	Standard	Standard	Standard	Standard	Standard	Standard
<b>120 Volt Receptacles</b>								
NEMA 5-20	2-20A	4-20A			4-20A GFI			2-20A GFI
NEMA L5-20	-	-		2-20A GFI		1-20A GFI	2-20A GFI	-
NEMA 5-50	-	-				1-50A		
<b>240 Volt Receptacles</b>								
NEMA L6-20	-	-		1-20A		-	-	-
NEMA L6-30	-	-	-	-	1-30A GFI		1-30A	
<b>120/240 Volt Receptacles</b>								
NEMA 14-30	-	-		1-30A		-		1-30A
NEMA 14-60	-	-	-	-		1-60A		-
<b>Additional Information</b>								
Dimensions (in)		24x17.5x18		32x22x22	33.5"x23"x23"	39x26x26	42x27x29	32x22x22
Weight (lbs)	68	102	226	254/262	306	412	476	310
Warranty (Eng/Gen)(4)	1 yr			3 yrs/2 yrs				2 yr/2 yr
CARB	Yes	Yes	Yes (6)	Yes (6)	Yes (6)	Yes (6)	Yes (6)	Yes
CSA	-	Yes	Yes	Yes	-	-	-	-
DB @ 7 Meters	72	77	79	78.5	76	75	79.25	82.3

Notes: (1) Code G capacitor start motor. (2) Available 120 volt current at the 50 amp full power plug. (3) Electric start models include battery rack and cables. (4) Engine warranty administered through engine manufacturer. (5) 240V only. (6) Specify CARB when ordering. (7) Specifications and receptacles are subject to change without notice.



### Conserv-R® (Automatic Idle Control)

WINCO generators equipped with a Conserv-R idle down when there is no load. The lower speeds reduce noise and engine wear while improving fuel economy. As soon as the generator detects demand, the engine returns to normal operating speed. This feature can easily be enabled by selecting the switch on the control panel.



WC5000H



W6010DEX

### Switchless Full Power

Most portable generators use switches to achieve full 120V power from one receptacle. These switches fail over time and disable all 240V output from the machine. WINCO's answer to these problems is Switchless Full Power. Extra copper in the stator windings enables the operator to obtain full 120V, full 240V or a combination of both (up to the nameplate rating) without any switches. Switchless Full Power models include a 50 amp (NEMA 5-50R) receptacle to distribute the machines maximum capacity from a single point.

### Continuous Improvement

You asked for them and WINCO delivered! We are proud to introduce two new industrial models for 2012.

The W3000H is easily maneuvered with its one of a kind ergonomically-balanced handle. The generator produces 2400 continuous watts and at 68 lbs is light enough to be carried with one hand. When you need power in hard to get places this generator carries its weight.



W3000H



WC10000VE

The newest Big Dog generator is our WC10000VE. The 18 hp B&S Vanguard commercial engine comes with a 3 year warranty. Standard features like a single point lifting eye, two-wheel industrial dolly kit, GFCI protection and clean power generator end make this the perfect generator for most applications.

## BIG DOG Generators



WL12000HE



WL18000VE



Every hour a work crew is down can cost hundreds if not thousands of dollars in direct and indirect costs. Big Dog portable generators prevent downtime by properly using the best components. WINCO engineers pay attention to a lot more than the obvious details like engines. Each generator end, steel part, paint spec, circuit breaker and receptacle is carefully selected to provide the maximum life and best reliability. The most demanding industries like single ply roofing and spray foam insulation depend on these generators because they are the most durable while providing exceptionally clean and reliable power.

## Standard Features and Benefits

### Engines

- Commercial grade Honda and B&S Vanguard engines.
- 3 year commercial use engine warranty.
- V-Twin design for smooth operation.

### Generators

- Class H insulation
- Die-cast high resistance aluminum alloy shell
- Shafts are constructed of C45 steel
- Waterproof bearings (IP21)
- Angle shifted auxiliary winding ensures reliable self energizing
- Total harmonic distortion that is less than 5% is safe for sensitive electronic equipment
  - Rotor is engineered with a damper cage
  - 2/3 pitch
- Voltage regulation is +/-5%
  - 425V heavy duty capacitors

- When block loaded with a resistive load the voltage recovers in less than 0.1 seconds
- Heavy duty diodes rated at 25 amps at 1200 volts
- Varistors add an additional layer of protection from high voltage transients. Varistors intervene at 360 volts AC or 470 volts DC preventing damage to the diodes

### Other Features

- Large non-corrosive 7 or 15 gallon fuel tanks provide uninterrupted power for full work days
- Ships with single point lifting bar and industrial dolly kit
- Square D circuit breakers
  - 1/60th second reaction time
  - Florescent red Visi-Trip indicator



# HOME POWER®

WINCO Tri-Fuel generators are essential to enjoy a weekend at the cabin or to prepare for power outages. Since the generators operate on gasoline, LP gas and natural gas they will keep your family safe, warm and dry no matter which fuel you have available.

## MODEL HPS6000HE HPS9000VE HPS12000HE

### Electrical Specifications

Max Rating (1)	6000 watts	9000 watts	12000 watts
Cont. Rating Gasoline	5500 watts	8000 watts	10800 watts
Cont. Rating LP	4950 watts	7200 watts	9720 watts
Cont. Rating NG	4400 watts	6400 watts	8640 watts
Voltage	120/240	120/240	120/240
Cont. Amps Gasoline	45.8/22.9	66.7/33.3	90/45
Motor Starting (1)(2)	2 hp	4 hp	5 hp

### Engine Data

Make/Model	Honda GX340	B&S Vanguard	Honda GX630
Displacement/Type	337 cc/OHV	480 cc/OHV	688 cc/OHV
Starting System (3)	Electric/Recoil	Electric/Recoil	Electric
Fuel Tank Capacity	4.5 gal	4.5 gal	15 gal
Low Oil Protection	Standard	Standard	Standard
dba Rating @ 7 Meters	72	77	78

### Fuel Consumptions

Gasoline	1.0 gal/hr	1.3 gal/hr	1.67 gal/hr
LP Vapor	1.6 gal/hr	1.9 gal/hr	2.2 gal/hr
Natural Gas	160 ft³/hr	180 ft³/hr	200 ft³/hr

### Receptacles

120V NEMA 5-20R	2-20 amp	4-20 amp	4-20 amp
120/240V Twist-Lock NEMA L14-30R	1-30 amp	1-30 amp	-
120/240V Straight Blade NEMA 14-60R	-	-	1-60 amp

### General Information

Dimensions (LxWxH)	30"x22"x22"	32"x22"x22"	39.5"x26"x26"
Shipping Weight	212 lb	274 lb	396 lb
EPA/CARB	Yes/No	Yes/No	Yes/No
Engine/Generator Warranty (4)	3 yr/1 yr	3 yr/1 yr	3 yr/1 yr

Notes: (1) Based on gasoline fuel. Derate 10% for LP Gas and 20% for NG. (2) Code G capacitor start motor. (3) Battery not included. Requires BCI Group U1, 12-volt battery: 235 cca or larger. (4) Commercial or Prime Power Warranty-90 days. Engine warranty administered by engine manufacturer. Contact your local B&S or Honda service center for warranty assistance. WINCO Inc. can assist in locating appropriate engine warranty support.



During weather related power outages, gasoline can become scarce and it is often difficult to obtain. The natural gas lines and your LP gas tank are normally unaffected. A WINCO Tri-Fuel generator will allow you to stay safe and warm in your home while everyone else tries to find fuel.

Some homeowners' associations do not allow permanently installed generators. WINCO Tri-Fuel generators can be stored out of sight in the garage when you don't need them. Since they also run on natural gas you can connect them to your home's gas system and stay comfortable during the outage.

The WINCO Tri-Fuel generator is portable giving you the flexibility to use it for multiple homes, at the cabin or to help family and neighbors keep their furnaces and sump pumps running during an emergency.

Winco generators are built with commercial grade Honda and Briggs & Stratton Vanguard engines. The generators provide clean power that is safe for household electronics.

Switching between fuels is quick and easy. To select vapor fuels turn off the gasoline supply valve and connect a correctly installed 3/4" vapor fuel line from your natural gas meter or LP tank to the factory installed demand regulator. To switch back to gasoline unhook your vapor fuel line and open the gasoline supply valve.

Gasoline can go bad quickly and is dangerous to store in large quantities. LP fuel is safer and easier to store, allowing you to maintain the fuel reserve you need in an emergency.

Aftermarket carburetor modifications void engine warranties. WINCO Tri-Fuel generators comes with a full engine warranty backed by a company with 85 years of strength.

The sturdy two-wheel dolly kit makes moving the generator easy. The optional fuel solenoid kit adds an automatic positive vapor fuel shut off for safety. See page 7 for detail.



HPS9000VE



HPS12000HE  
Shown Without Included Dolly Kit



HPS6000HE



# DYNA

## Consumer Portable Generators

WINCO's DYNA consumer portable generators are perfect for the cabin, projects around the house or to keep your well and sump pump going during an outage. At WINCO we believe in building the best products available, and as a result, our DYNA portables outlast many of our competitors' "Commercial" models.

### Features and Benefits

- Premium Honda and B&S engines
- 100% copper windings
- Sturdy wrap-around welded tubular cradles
- Durable, long lasting powder coat paint
- Non-corrosive fuel tanks
- Light compact designs
- Premium Square D two pole breakers (240V models)



	D3000H	DL5000H	DL6000H DL6000HE	DL6000I DL6000IE
Electrical Data				
Max Watts	3000	5000	6000	6000
Cont. Watts	2400	4500	5500	5500
Output (V)	120	120/240	120/240	120/240
Cont. Amps	19.1	37.4/18.7	45/22.5	45/22.5
Motor Starting (1)	.75 hp	1.5 hp	1.5 hp	2 hp
Engine Data				
	Honda (GC)	Honda (Commercial)	B&S Intek	
Model	GC160	GX270	GX340	B&S Intek
Displacement	160 cc	270 cc	337 cc	342 cc
Low Oil Shutdown	Standard	Standard	Standard	Standard
Starting System (2)	Recoil Only		Rec/Elec	
Fuel Tank	2 qt	4.5 gal	4.5 gal	4.5 gal
Running Time				
Full Load	1.1 hr	6.6 hr	4.5 hr	5.3 hr
Half Load	1.5 hr	10.3 hr	6.4 hr	8.5 hr
120 Volt Receptacles				
NEMA 5-20	2-20A	4-20A	4-20A GFI	
120/240 Volt Receptacles				
NEMA 14-30	-	1-30A		
Additional Information				
Dimensions (in)(4)	20x15x16	28x19x22	30x22x22	26x18x21
Weight (lbs)	88	148	202/210	158/168
Warranty (Eng/Gen)(3)	2/2 yr	3/2 yr		2/2 yr
CARB	Yes	Yes (5)	Yes (5)	No
CSA	Yes	-	Yes	-
DB @ 7 Meters	72	79.5	78.5	72
Notes: (1) Code G capacitor start motor. (2) Electric start models include battery rack and cables. (3) Engine warranty administered through engine manufacturer. (4) Approximate dimensions only. (5) Specify CARB when ordering.				

Notes: (1) Code G capacitor start motor. (2) Electric start models include battery rack and cables. (3) Engine warranty administered through engine manufacturer. (4) Approximate dimensions only. (5) Specify CARB when ordering.

## Portable Generator Accessories (See Price Sheets For Compatibility)

**A. Two-Wheel Industrial Dolly Kit-4.5-9 kw (25 lbs):** The 8" diameter pneumatic tires get you through mud, snow, sand and soggy lawns. Durable grip handles assure easy maneuverability.

**B. Four-Wheel Industrial Dolly Kit-6-9 kw (32 lbs):** The 4-wheel dolly kit comes with the same rugged components as the 2-wheel kit. The extra axle eliminates the need for any lifting while moving the generator across the ground. The HPS12000HE, WL12000HE and WL18000VE come with a 4-wheel kit (Accessory BB) standard.

**C. Residential Dolly Kit-DL6000I/IE (16 lbs):**

This 2-wheel hard tire dolly kit is designed to be an economical dolly kit for homeowners.

**D. Small Generator Cover-4.5-10kw:** This durable tailored cover is made of heavy canvas to protect your WINCO portable generator in all weather conditions. During storage or transportation, the customer generator cover protects your portable generator from moisture, dust, nicks and scratches. A built-in band keeps the cover in place.

**E. Large Generator Cover-12-18kw (5 lbs):** Same features as the small generator cover.

**F. Single Point Lifting Bar-4-9.5kw:** This accessory allows your WINCO portable generator to be lifted by crane from floor to floor or to be suspended for overnight security.

The single point lifting bar is easily installed. The single point lifting bar is factory installed on Big Dog models.

**G. Single Point Lifting Bar-HPS12000HE:** Same feature as above.

**H. Plug-In Line Voltage Monitor (1 lb):** The compact voltmeter can be plugged into any 15 or 20 amp 120V straight blade receptacle to verify output voltage.



**I. 50 amp (CS6365C) Twist-Lock Plug #64493 (2 lbs)**

**J. 30 amp (NEMA L14-30P) Locking Plug #64492 (1 lb)**

**K. 60 amp (NEMA 14-60P) Plug #300137 (1 lb)**

**L. Low Pressure Fuel Solenoid Kit (4 lbs):** Tri-Fuel generators that will be run unattended or permanently connected to a fuel source must have an electric fuel solenoid installed in the fuel line close to the generator. This solenoid is a positive flow shut-off valve which protects the demand regulator from wear that may result in dangerous or costly leaks.

**Winco Emergency Transfer/Service Kits:** The ET/S system allows your portable generator to be quickly and safely connected to a building electrical panel for backup service during a power outage. An outdoor enclosure stores the 12' power cord with the 30 or 60 amp plug when it is not in use. A quality square D circuit breaker load center with interlocked generator and utility main breakers prevent feedback and installs next to the building's electrical service panel. Four 120V (8 tandem), two 240V branch circuits or combination of both can be connected for emergency use. Switches are not UL listed.

**M. 60/30 amps (45 lbs): Includes NEMA L14-30 Plug**

**N. 60/60 amps (48 lbs): Includes NEMA 14-60 Plug**

**O. Gen Tran Manual Transfer Switch Kit:** 8-circuit, 30-amp UL approved manual transfer switch allows generator connection to electrical service for emergency power backup. 30-amp system includes power inlet box and 25-foot connection cord in NEMA 1 enclosure.



# Air-Cooled Packaged Standby System



## Performance Data (NG/LP)

Model	kW	kVa	Amps	kW	kVa	Amps
PSS8B	8.4	8.4	35	7.6	7.6	32
PSS12H	12	12	50	10	10	41
PSS15B	15	15	62.5	12	12	50
PSS20B (2)	Available 2012			Available 2012		

Notes: (1) Derate 3.5% per 1,000 feet elevation above sea level. (2) New product available during 2012.

## Engines

- Commercial grade V-twin engines are standard in all models for smooth clean power.
- Pressurized lubrication system with spin-on oil filter.
- Generator exercises at operating speed to run complete diagnostics on the system.
- Converting between natural gas and LP gas is simple and easily done in the field.

## Installation

- Generator design allows side wall or sub-base underground connections.
- Easy to use AC and DC terminal blocks make connections quick and simple.

## Weatherproof Enclosure

- Quiet neighbor-friendly operation.
- Fire-retardant sound absorbing foam.
- Galvaneal steel weatherproof housings are strong and durable at all temperatures.
- All panels are lockable and identically keyed.
- Side panels allow access to the generator for maintenance without having to remove or open the roof exposing the internal components to the elements.
- Unique three chamber housing design (see drawing to right) increases air flow while reducing noise and heat.

## Additional Features

- Included battery charger prevents sulfation increasing the reliability and service life of the battery. The .75A multi-stage charger always charges at the proper rate preventing battery damage.
- Fast automatic response to power outages with optional transfer switch restores power in less than 30 seconds.

## Safety Features

- Complete safety shutdowns including high oil temp, low oil pressure, low frequency and low voltage protect the generator and load.
- Over current protection by high quality thermal-magnetic Square D breaker with Visi-Trip and 1/60 second reaction time.
- Double disc fuel solenoids ensure positive fuel shut-off.
- Steel fuel inlet prevents dangerous cracks.
- CSA approved and ETL listed to UL Standard 2200.
- All models are EPA/CARB compliant.

## Dimensional Data

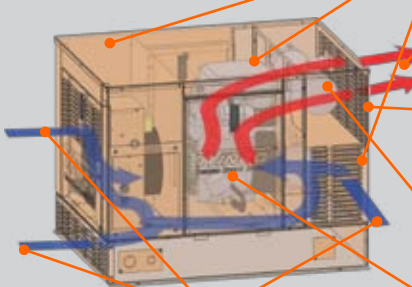
	L	W	H	Weight
PSS8B	36 1/2"	29 3/4"	27 3/8"	385 lbs
PSS12H	40 11/16"	31 3/4"	30 7/8"	530 lbs
PSS15B	48 3/16"	32 3/4"	34 3/8"	760 lbs
PSS20B	Available 2012			

## Model Sound Levels

	No Load				Full Load			
	L	R	F	B	L	R	F	B
PSS8B4W	63.2	64.4	66.4	63.8	64.9	65.3	68.5	65.3
PSS12H4W	64.5	62.1	68.2	66.1	67.5	64.3	69.5	66.1
PSS15B4W	65.6	71.8	71.1	67.7	71.6	71.2	71.1	72.4
PSS20B4W	Available 2012				Available 2012			

Notes: (1) All measurements are in db(a). (2) Tested at 7 meters (23 ft.).

## Generator Cooling System



Three air intakes provide plenty cooling air. The extra cooling capacity provides adequate air flow even if intakes become partially obstructed.

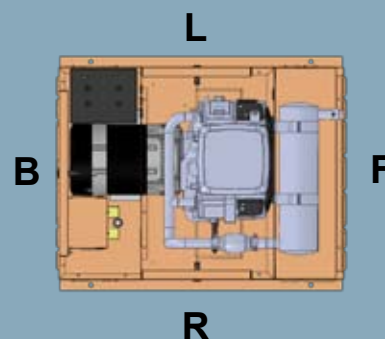
Exclusive three chamber design controls air movement through the generator.

Heat is discharged away from intakes to prevent recirculation.

After the engine is shut down the venting system takes advantage of convection to reduce heat soak.

Critical grade muffler reduces exhaust noise about 25 dba making the generator very neighbor-friendly.

Pressurized engine compartment prevents hot spots by forcing total air circulation.





## Engine Specifications

	PSS8B	PSS12H	PSS15B	PSS20B
Make	B&S	Honda	B&S	B&S
Model	Vanguard	GX690	Vanguard	Vanguard
Displacement	570 cc	688 cc	895 cc	993 cc
Cylinders	V-Twin			
Cylinder Sleeves	Cast Iron			
Lubrication	Forced with Spin-On Filter			
Ignition	Electronic			
Engine Speed	3600			
Governor	Mechanical			
Regulation	+/-1.8 hz Steady State			
Fuel	LP/NG Field Selectable			
Exhaust	Critical Grade, Glass-pack			
Low Oil	Shutdown			
High Oil Temp.	Shutdown			
EPA/CARB	Yes	Yes	Yes	Yes

## Electrical Specifications

Output	120/240V Single Phase
Design	Rotating Field
Poles	2
Voltage Regulation	+/-5%
Insulation	Class H
Temperature Rise	125°/40° C
Windings	100% Copper
Bearings	Weatherproof Maintenance Free
Harmonic Distortion	<5%
Rotor	2/3 Pitch
Load Acceptance	100% Rating/Single Step
DC System Voltage	12V
DC Alternator	Engine Mounted
Battery Rack/Cable	Included
Battery Charger	Included (4 Stage)
Start Battery	Group 26, 500 CCA (Not included)

## Fuel Requirements

	Load	PSS8B	PSS12H	PSS15B	PSS20B
Natural Gas	100%	132	195	260	328
	50%	95	140	170	239
LP Gas	100%	1.6	2.2	2.96	3.61
	50%	1.0	1.4	1.75	2.60
Flow Rate NG (BTU/HR)		132,000	190,000	260,000	328,000
Flow Rate LP (BTU/HR)		158,760	194,000	272,160	329,000

**Notes:** (1) Natural gas measured in ft³/hr. (2) LP gas measured in gal/hr. (3) Requires 7-11" water column (4-6 oz) fuel pressure. (4) Flow rates are at full load. (5) 3/4" Fuel Inlet.

## Fuel Tank/Line Sizing (Gallon)

	PSS8B	PSS12H	PSS15B	PSS20B
60° F (16° C)	150	150	150	150
32° F (0° C)	150	250	250	250
0° F (-18° C)	250	500	500	500
-20° F (-29° C)	500	1000	1000	1000

Feet	Pipe Size (Add 3' for each elbow. Do not use 'street ells.)
Up to 25'	3/4" Pipe
25'-100'	1" Pipe
Over 100'	Use a 2 regulator system.

**Winco Air-Cooled Packaged Standby Systems are available with both 4-wire and 2-wire control modules. The choice of controllers give you the flexibility to effectively meet any application's requirements without compromise.**

### 4-Wire Start Module

The Winco 4-wire control module is designed to work with the ASCO 165 4-wire transfer switches. All starting controls including start contacts, fuel solenoid contacts and time delays are built into the transfer switch. If a fault occurs, the transfer switch will shut down the system and display diagnostic code. This system is ideal for most residential standby installations.

### 2-Wire Start Module

The Winco 2-wire control module starts the generator when a dry contact closes, making it compatible with most transfer switches and other starting devices. All generator start and shutdown functions are controlled by the 2-wire control module. The module provides detailed operating and diagnostic information through its digital display. This module is recommended for applications with compatible transfer switches, solar, pump and independent operation.

### Controller Features

	4-Wire	2-Wire
Fail To Start	X	X
Fail To Stop	-	X
Low Oil Pressure	X(1)	X
High Engine Oil Temp.	X(1)	X
Under Frequency/Speed	X(1)	X
Over Frequency/Speed	X(1)	X
Low Voltage	X(1)	X
High Voltage	X(1)	X
Battery Over/Under Voltage	-	X
Digital Display	-	X

Notes: (1) ATS displays a generic fault code.

## Accessories

- ASCO 165 ATS (2 or 4 Wire)
- ASCO 185 ATS (2 Wire Only)
- Oil Heater Kit (With Thermostat)
- Battery Heater Kit
- Vapor Strainer Kit (3/4")

# Automatic Standby Generators

WINCO and WINPOWER liquid-cooled automatic standby generators are designed to reliably deliver power when you need it, even when you are not on site. Each generator is designed to automatically provide back-up power for industrial applications making them suitable for anything from home standby to critical care facilities. To protect your investment, a sophisticated digital controller starts, monitors and shuts down your generator. If any key operating parameters are out of tolerance, the generator will provide a warning or immediately shut-down if the problem is serious enough. WINCO and WINPOWER offer the best features for the best long-term value.

## Standard Features

WINCO and WINPOWER build each standby generator with the necessary features to provide reliable back-up power. We don't offer introductory units that lack essential features.

- Premium Deep Sea 7110 and 7310 genset controllers.
- Kim Hotstart jacket heater included standard.
- Standard 3-stage battery charger increases battery life.
- Premium Square D mainline circuit breakers.
- Battery rack and cables included standard (Battery not included).
- Each unit is 100% load tested.

## Gaseous Generator Models

Model	PSS21	PSS30	PSS40	PSS60	PSS90	GR110	GR150	GR180
Manufacturer	WINCO PACKAGED STANDBY SYSTEM					WINPOWER GR		
Engine Data								
Engine Make	GM	GM	GM	GM	GM	GM	GM	Doosan
Engine Model	3.0L	3.0L	4.3L	5.7L	5.7L TAC	8.1L T	8.1L TAC	11.05L TAC
Cylinders	In-line 4	In-line 4	V-6	V-8	V-8	V-8	V-8	In-line 6
Speed	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm
Fuel Consumption								
100% Load LP	3.9 gal/hr	4.83 gal/hr	5.91 gal/hr	9.29 gal/hr	12.4 gal/hr	582 ft³/hr		703 ft³/hr
100% Load NG	240 ft³/hr	432 ft³/hr	499 ft³/hr	799 ft³/hr	1149 ft³/hr	1651 ft³/hr	1752 ft³/hr	2115 ft³/hr
Electrical Performance (LP/NG)(1)								
120/240 1-PH (Amps)	88/88	125/125	167/167	233/229	333/375	458/458	500/583	533/712
120/208 3-PH (Amps)	76/76	104/104	139/139	208/201	278/312	382/382	433/521	469/625
120/240 3-PH (Amps)	66/66	90/90	120/120	180/174	240/270	331/331	375/452	406/542
277/480 3-PH (Amps)	37/37	45/45	60/60	90/87	120/135	166/166	187/226	203/271
Max Standby Rating (2)(3)	25 kW	30 kW	40 kW	60 kW	90 kW	110 kW	150 kW	180 kW
General Information								
Control Panel	DSE 7110					DSE 7310		
Warranty (4)	Engine: 3 Years/3500 Hours					Generator: 1 Year/1000 Hours		

**Notes:** (1) All electrical ratings assume 1.0 pf for single phase and 0.8 pf for three phase. All ratings are standby. (2) Highest rating at optimal voltage and power factor. (3) Derate 10% for prime power. All models except GR180 require on-site emissions certifications for prime power. (4) Engine limited warranty administered through engine manufacturer. Warranty applies to GM engines only. Contact factory for full warranty information.

## Diesel Generator Models

Model	DR12K2	DR20I4	DR30I4	DR45I4	DR65I4	DR90I4	DR100I4	DR130I4	DR175I4	DR200D4	DR250I4	DR300I4	DR350I4
Winpower DR													
Engine Data													
Make	Kohler	Isuzu	Isuzu	Iveco	Iveco	Iveco	Iveco	Iveco	Iveco	Deutz	Iveco	Iveco	Iveco
Model	KDW1003	4LE1	4LE1T	N45SM1	N45SM2	N45TM2	N67TM1	N67TM1	N67TE2	BF6M1013FC	C87TE1D	C10TE1D	C13TE3X
Cylinders	In-line 3	In-Line 4	In-line 4	In-Line 4	In-Line 4	In-line 4	In-line 6	In-line 6	In-line 6	In-line 6	In-line 6	In-line 6	In-line 6
Displacement	1028 cc	2.2L	2.2L	4.5L	4.5L	4.5L	6.7L	6.7L	6.7L	7.1L	8.7L	10.3L	13L
Speed (rpm)	3600	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Fuel Consumption (gal/hr)													
100% Load	1.27	1.80	1.99	4.09	4.57	6.94	8.10	8.80	12.42	13.00	16.98	20.20	24.50
50% Load	0.79	0.90	1.00	2.16	2.38	3.57	4.10	5.31	6.45	7.00	10.25	11.50	14.35
Electrical Performance (Amps)(1)(2)(3)													
120/240 1-PH	50	83	125	187	258	358	416	512	695	833	NA	NA	NA
120/208 3-PH	42	69	104	156	215	312	364	451	608	695	867	1041	1111
120/240 3-PH	36	60	90	135	186	271	315	391	527	602	752	902	960
277/480 3-PH	18	30	45	68	93	135	172	195	263	301	376	451	526
Max Standby	12 kW	20 kW	30 kW	45 kW	62 kW	90 kW	115 kW	130 kW	175 kW	200 kW	250 kW	300 kW	350 kW
General Information													
Control Panel	DSE7110					DSE7310							
Warranty (4)	Engine: 5 Years/2000 Hours					Generator: 1 Year/1000 Hours							

**Notes:** (1) All electrical ratings assume 1.0 pf for single phase and 0.8 pf for three phase. All ratings are standby. (2) Max standby rating is at optimal voltage and power factor. (3) Derate 10% for prime power. (4) Engine limited warranty administered through engine manufacturer. Deutz warranty covers 2 years/3000 hours. Contact factory for full warranty information.



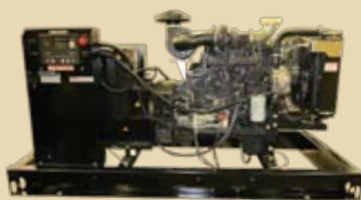
## Housing Options

All housings are constructed of 16 gauge (Winco) 14 gauge (Winpower) galvaneel steel with DuPont powder coat paint to protect against corrosion. Each housing comes with identically keyed lockable doors, drip edges, critical grade exhaust and sound absorbing foam. Each generator is designed to be rodent proof.

**WINCO PSS:** Each unit comes standard with a sound attenuated housing.

**WINPOWER Powr-Pak:** Each WINPOWER model is available in an open skid version. Exhaust ships loose.

**WINPOWER Sound-Pak:** Specify optional sound attenuated enclosure when ordering.



Powr-Pak



PSS 21kW-90kW

## Convenient Customer Connections

All customer connection points are centrally located to make AC and DC connections quick and easy. The DC control wires are connected to a clearly labeled and convenient terminal block. A terminal block is installed for the factory wired multi-stage battery charger and thermostat controlled jacket heater.

## Stamford Generator Ends

The premium Stamford generators are sized for 125°/40° C operation. Standard features like 100% copper windings, automatic voltage regulators and <5% THD make these generators suitable for almost any application. Single phase generators use dedicated windings while all three phase voltages use 12 lead reconnectable ends. Generators are available with optional EBS/PMG adders to increase motor starting ability.

## NFPA 110 Level 1

Critical care facilities like nursing homes and hospitals require upgraded components like larger battery chargers, jacket heaters, and remote annunciators. Each generator can be ordered in a configuration that meets NFPA 110 Level 1 standards (requires DSE 7310).



DR200D4 With Sound-Pak and UL142 Sub-base Tank

## Sub-Base Diesel Fuel Tanks

Each WINPOWER diesel generator is compatible with UL 142 sub-base fuel tanks. Constructed of heavy duty steel with a 110% secondary containment system prevents costly environmental disasters. Other standard features include leak detection, digital and mechanical fuel gauges, UL approved vents, baffles and lockable fuel caps. The DR12K2 and DR2014 are available with 32 gallon composite tanks that are secured in the base. Composite tanks are not UL142 approved.

## Automatic Starting

Each generator with a sound attenuated housing comes with critical grade silencers that reduce exhaust noise by 25-35 dba making these models suitable for use in residential and commercial applications.

## Digital Controller Features

Engine Display/Protection	DSE 7110	DSE 7310
Engine RPM	X	X
Low Oil Pressure	X	X
High Coolant Temp	X	X
Low Coolant Level	Optional	Optional
Overspeed	X	X
Underspeed	X	X
Overcrank	X	X
Charging Alternator Fail	X	X
CAN ECU Shutdown	X	X

## Genset Display/Protection

Voltage (L-N) Display	X	X
Voltage (L-L) Display	X	X
Overvoltage Shutdown	X	X
Undervoltage Shutdown	X	X
Frequency Display	X	X
Overfrequency Shutdown	X	X
Underfrequency Shutdown	X	X
Phase Imbalance	-	Disabled
Amp Display/Shutdown	X	X
kW, kVAh, kVArh Display	-	X
kWh, kVAh, kVArh Display	-	X
Generator Phase Sequence	-	X
Earth Current	-	Optional

## Additional Displays/Protections

Emergency Stop	X	X
Fuel Leak/Sender Failure	X	X
High Fuel Level	Optional	Optional
Low Fuel Level	X	X
Fuel Level Gauge (Digital)	X	X
Battery Voltage	X	X
Battery Over/Under Voltage	X	X
Battery Charger Failure	Optional	Optional

## Communications

USB Connectable	X	X
RS232/RS485	X	X
NFPA Annunciator	-	X
Remote Display Panel	-	3xDSE2510
Ethernet	-	Optional

## Additional Features

Audible Alarm	-	X
Engine Exerciser	Programmable	
Maintenance Interval Timer	1 Event	3 Events
Load Shedding/Dummy	-	5 Step
Configurable Inputs	7	9-24w/DSE2130
Configurable Outputs	8	6-80w/DSE2751
Event Log	5	250
Alternative Configurations	1	3
UL/CSA Listed	X	X

# Automatic Transfer Switches

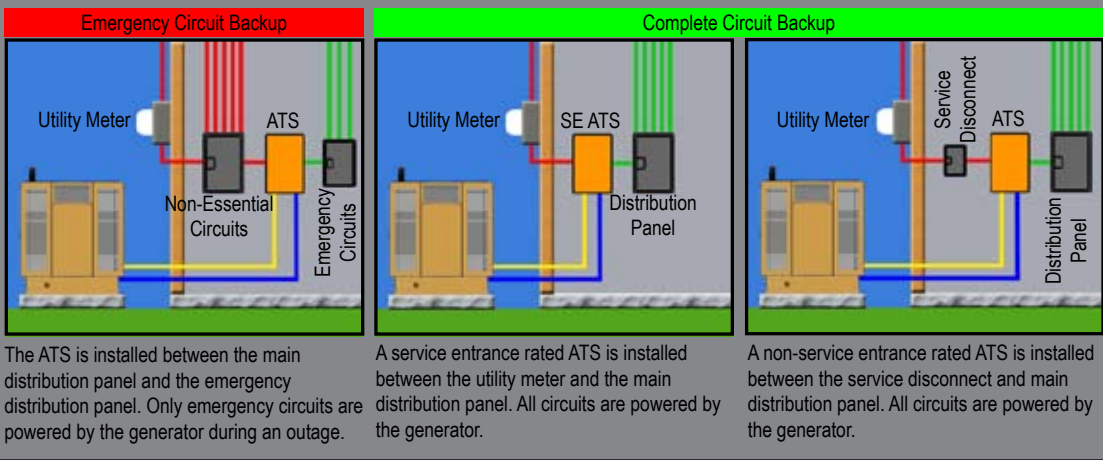
A high quality automatic transfer switch (ATS) is necessary to safely install an emergency generator. The ATS is designed to prevent the generator from back feeding the utility and to protect the generator when utility power is restored. WINCO recommends ASCO switches for our generators because over the years they have been proven in field applications to work when you need them most.

## Typical Installations

There are three common installation methods for automatic standby generators. Proper installation depends upon each application and local ordinances.

### Key

- Powered By Utility Only
- Always Powered (Gen+Util)
- Generator Output
- DC Control Wires



ASCO 165



ASCO 185



ASCO 300

ASCO Series	165	185	300
Application	Residential	Res./Light Com.	Commercial
Start Control	4-Wire(1)	2-Wire	2-Wire
Memory Battery	Yes	Yes	Yes
Service Entrance Rated	No	Optional	Optional
Restore Power	<30 Sec	<30 Sec	<10 Sec
Momentary Utility Failure Delay	3 Sec	Adj 1 or 3 Sec	Adj 0-5 Min
Generator Cooldown	1 Min	Adj 2-5 Min	5 Min
Exercise Period	14 Day	7 Day	7 Day
Exercise Time	20 Min	20 Min	20 Min
Exercise on Load	Selectable	Selectable	Selectable
Transfer To Emergency Delay	15 Sec	10 Sec	0-5 Min
Cool Down Delay	1 Min	2-5 Min	5 Min
Utility Retransfer Delay	5 Min	5 Min	Adj 0-30 Min
Standard Auxiliary Contacts	No	No	Yes (1 Set)
UL Listed	1008	1008	1008
NFPA 110 Level 1 (2)	No	No	Yes
Electrical Features			
Available Voltages	240V, 60Hz 1-Ph	240V 60 Hz 1-Ph	≤600V 1/3-PH
Available Poles	2	2	2-4
Amperage Range	100-200	100-400	30-3000
Normal Voltage Pick-Up	204V	Adj 198-209V	Adj 90-95% Nominal
Normal Voltage Drop-Out	180V	Adj 176V or 198V	Adj 70-90% Nominal
Frequency Pick-Up	57 Hz	57 Hz	95% Nominal
Frequency Drop-Out	54 Hz	51 Hz	85% Nominal
Enclosure Options			
NEMA 1	Yes	Yes	Yes
NEMA 3R	Yes	Yes	Yes
NEMA 4	No	No	Yes
NEMA 4X	No	No	Yes
NEMA 12	No	No	Yes
Accessories			
Strip Heater	No	K732212-003	44A(Ext) 44G (Load)
Auxiliary Contacts	No	14A/14B (3)S	14AA/14BA
Connectivity Module	No	Yes	Yes
Programmable Engine Exerciser	No	No	(11BG)
Remote Annunciator Kit	No	Yes	Yes
Remote Control			
Remote Test Switch Terminals	No	Yes	Yes
Remote Auto Transfer Terminals	No	Test	Test and Peak Shaving
Remote Time Delay Bypass Termal	No	Yes	Yes

Notes: (1) For use with WINCO air-cooled Packaged Standby Generators only. (2) Consult factory for NFPA 110 Level 1 compliant generators. (3) Standard 260-400A.



# Mobile Diesel Generators

You don't always know what voltage you will need on the next job. WINCO REDI POWER and WINPOWER DX mobile diesel generators are designed with reliability, flexibility and safety in mind so that electrical power is never a problem on your job sites.

## Features and Benefits

### Engine

- Industrial Isuzu, Iveco (Powers Case/New Holland Construction and Ag Equipment) and Deutz diesel engines.
- Long Maintenance Intervals

### Generators

- Stamford Industrial Generators
- 125°/40° C Temperature Rise
- Class H Insulation
- <5% Total Harmonic Distortion
- +/-1 to 1.5 % Voltage Regulation

### Voltage Selection

- Standard Redi-Power
  - 4 Position Switch Provides True L-L and L-N Voltage In All 4 Common Voltages
  - 120/240 1-PH Double Delta, 120/208 3-PH Low-Wye, 120/240 3-PH Delta, 277/480 3-PH High-Wye
- Standard DX
  - 3 Position: 120/208 3-PH Low-Wye, 120/240 3-PH Delta (120/240 1-PH Is Available Using Two Poles Excluding Wild Leg), 277/480 3-PH High-Wye
- Optional DX
  - 3 Position: 120/240 1-PH Double Delta, 120/208 3-PH Low-Wye (139/240 3-Ph Available With Rheostat Adjustment), 277/480 3-PH High-Wye

### Controls

- Digital Control/Instrument Panel Resets Safety Shutdowns Automatically When Voltage Changes
- 2-Wire Start Included Standard With An Easy To Use DC Terminal Block
- Voltage Selector Switch Is Pad-Lockable And Shuts Down The Engine If Anyone Attempts To Switch Voltages During Operation
- Lead Connections Are Easy To Access Panel Includes Safety Shut-Down Switch If Access Panel Is Opened When Terminal Block Is Live
- Main Line Over-Current Circuit Breaker Protection With Digital Overload Monitoring And Shutdown
- Red Mushroom Emergency Stop Button
- Power Disconnect Preserves Battery When Not In Use
- Receptacle Package Included Standard-Terminal Block; 2xNEMA 5-20R GFCI; 2x50A Twist-Lock (CS6365C)

### Other Features

- DOT Approved Trailer & Fuel Tanks
- Adjustable Height Couplers
- Stabilizing Jacks Included Standard
- Optional Toolboxes Available.



RP55  
(Shown With Optional Equipment)



DX200



DX Control Panel

Model	RP25	RP55	RP80	DX90	DX100	DX130	DX175	DX200	
Manufacturer	WINCO REDI POWER			WINPOWER DX					
Engine Data									
Engine Make	Isuzu	Iveco	Iveco	Iveco	Iveco	Iveco	Iveco	Deutz	
Engine Model	4LE1	NEF45 SM1X	NEF45 SM2X	NEF45 TM2X	NEF67 TM1X	NEF67 TM1X	NEF67 TE2X	BF4M1013FC	
Emissions	Tier IVi	Tier III	Tier III	Tier III	Tier III	Tier III	Tier III	Tier II	
Speed	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	1800 rpm	
Fuel Consumption (gal/hr)									
100% Load	1.80	4.09	4.57	6.94	7.71	8.8	12.42	13.0	
80% Load	1.40	3.09	3.35	5.1	6.78	7.71	10.3	10.6	
50% Load	0.90	2.16	2.38	3.57	4.67	5.31	6.45	7.0	
Electrical Performance (Amps) (1)									
120/240 1-PH	Double Delta	83	187	233	281	328	453	593	670
	Delta (2)	Not Rated			187	218	302	395	447
120/208 3-PH	Low Wye	69	156	215	312	364	450	607	694
120/240 3-PH	Delta	60	135	186	270	315	390	525	600
139/240 3-PH	Low Wye (3)	Not Rated			256	299	370	499	570
277/480 3-PH	High Wye	30	67	93	135	172	195	263	300
Max kW (Standby/Prime)		20/18	45/40.5	62/55.8	90/81	115/115	130/117	175/157	200/180
Max kVa (Standby/Prime)		25/22	55/50	78/70	113/102	144/144	162/145	218/196	250/225
General Information									
Control Panel	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Digital	
Fuel Capacity	45	110	110	175	175	175	175	300	
dBa (4)	66	68	70	74	77	78	79	82	
Warranty (5)				1 Year/1000 Hours					

**Notes:** (1) All electrical ratings assume 1.0 PF for single phase and 0.8 PF for three phase. (2) 120/240V 1-PH is available by pulling two phases off the Delta Connection. Care must be taken to not mistake the "Wild Leg." (3) 139/240V 3-PH is available with a rheostat adjustment from the 120/208V 3-PH Low Wye switch position. (4) All sound levels are the loudest point at 7 meters. (21 ft.). (5) Engine warranty administered by engine manufacturers' service network.

# PTO Generators

WINCO has been manufacturing Power Take-Off (PTO) generators since the 1940's. Over the years WINCO generators have proven their reliability by logging millions of hours during power outages. WINCO has grown to be the largest PTO manufacturer in the United States and manufactures PTO generators suitable for everyone from the hobby farmer to large agricultural operations.



## Features and Benefits

- **Heavy Duty Construction:** Each generator is built with a solid steel (W15PTOS is aluminum) shell to protect the stator and rotor from damage and to dissipate heat. All models have steel mounting feet to facilitate trailer mounting, foundation or three point hitch installation.
- **Heavy Duty Gearboxes:** All gearboxes are constructed of cast steel. Winco does not use any aluminum gearboxes. All gears are of a helical design to reduce noise and metal stress while operating much smoother than spur gears.
- **Lifting Eye:** Each generator comes with a lifting eye to aid in installation and storage.
- **Sealed Bearings:** All bearings are sealed designs that are maintenance free.
- **Mainline Circuit Breaker:** All models include a high quality Square D circuit breaker.
- **Full Power Receptacle and Plug:** Each generator from 60-350 amps includes standard a full power receptacle and mating plug. Additional convenience receptacles are also provided.
- **Rodent Screen:** All models are rodent proof.
- **Buck-Boost Transformer:** Each model 35 kW to 75 kW comes standard with a buck-boost transformer. The buck-boost transformer holds voltages higher during heaving motor starting which increases the starting capability of WINCO PTO generators over automatic voltage regulator controlled models. To illustrate the improved motor starting, the 75FPTOC-4 is capable of starting the same motor load as the WINCO AVR controlled W105FPTOT. See the chart for motor starting capacity by model.
- **Automatic Voltage Regulator (AVR):** All models 85kW to 165kW have an AVR to electronically control excitation and maintain voltage to +/-2%.
- **Copper Windings:** All windings are 100% copper.
- **PTO Safety Shield:** Every PTO generator comes with a factory installed steel safety shield to protect the operator.
- **Accessories:** WINCO offers a complete line of PTO accessories including PTO shafts, trailers, three point hitch kits and manual transfer switches. Contact your sales representative for availability and compatibility details.

Winco Manufactured Transformer



TPH240 w/25PTOC-3

## Domestically Manufactured

At WINCO we are a lot more than a generator assembler. Every PTO generator from 25kW to 75kW is completely manufactured in Le Center, Minnesota. Complete control over the manufacturing process from start to finish allows us to build and closely monitor the quality of each component of every WINCO PTO generator. The W15PTOS and all models 85kW and larger are assembled in our Minnesota factory and thoroughly tested.



Automated rotor winding machine.



Multi-Spindle drills ensure precise hole alignment.

- All gearboxes and shells arrive at the factory as raw steel and castings. The steel is welded and machined to tolerance. Each gearbox is bored to within +/-3/1000" as a mated pair to ensure proper shaft alignment.
- The stators and rotors start the manufacturing process as raw stamped steel. The laminations are stacked, aligned, and then welded. Each rotor shaft is turned in house before the rotor laminations are hydraulically pressed onto the shaft. All stator and rotor windings are generously wound with 100% copper wire increasing generator efficiency while improving motor starting. The windings are then epoxy dipped and baked to insulate the stator and rotor. The rotor is carefully balanced to ensure even rotation.
- All exposed steel components are powder coat painted to ensure long life by protecting the part from corrosion.
- The rotor, stator and electrical boxes are assembled by knowledgeable staff. Each generator is tested under full load for 15-20 minutes to ensure proper operation and performance.



Gearcase with helical gears.



Completed rotor ready for the epoxy dip.



## SINGLE PHASE PTO MODELS

MODEL	W15PTOS	25PTOC-3	35PTOC-3	50PTOC-3	W85FPTOS	W100FPTOS	W150FPTOS
Power Rating (Watts)(1)	15,000	25,000	35,000	50,000	85,000	100,000	150,000
AC Output Voltage	120/240	120/240	120/240	120/240	120/240	120/240	120/240
Phase	1	1	1	1	1	1	1
Amps (Continuous)(2)	60	104	146	208	354	416	625
Generator Speed (RPM)	3600	3600	1800	1800	1800	1800	1800
<b>Receptacles</b>							
NEMA 5-20R	1	1	1	1	1	1	1
NEMA 6-50R	-	1	1	1	1	1	1
Full Power Plug	Included	Included	Included	Included	Included	Included	Breaker (6)
Tractor HP (3)	30	50	70	100	170	200	290
PTO Input Speed	515	540 (7)	540 (7)	540 (7)	1000	1000	1000
Code G Motor Starting (4)	8	10	20	25	45	55	75
Generator Type (5)	RFL(C)	RAB	RFB	RFB	RFL(X)	RFL(X)	RFL(X)
Dimensions (LxWxH)	33x19x20	29x16x20	39x20x21	39x20x21	49x17x27	47x21x30	47x27x30
Ship Weight (lbs)	292	330	536	612	1080	1275	1620
Warranty	1 Year	3 Years	3 Years	3 Years	1 Year	1 Year	1 Year

Notes: (1) Continuous rating per NEMA MG1-22.40 standards. (2) Unity (1.0) power factor. (3) Recommended tractor hp for full rated output. Each 2 hp of tractor power equals approximately 1 kW of electric power output. (4) NEMA Code G capacitor start motor. (5) RFL(C) is Rotating Field Brushless, capacitor excitation; RFL(X) is Rotating Field Brushless, external regulation; RAB is Rotating Armature Brush Type; RFB is Rotating Field Brush Type. (6) Full power connection is made directly to the main line circuit breaker. (7) Optional factory installed 1000 RPM gearcase is available.

## THREE PHASE PTO MODELS

MODEL	40PTOC-4	45PTOC-17	75PTOC-4	75PTOC-17	W105FPTOT	W145FPTOT
Power Rating (kW)(1)	40	45	75	75	105, 105, 120	145, 145, 165
AC Output Voltage	120/208	120/240	120/208	120/240	120/208, 120/240, 277/480 (9)	120/208, 120/240, 277/480 (9)
Phase	3	3	3	3	3	3
Amps (Continuous)(2)	138	135	260	225	364, 315, 180	503, 435, 248
Amps (Continuous)(3)	111	108	208	180	291, 253, 126	402, 349, 174
Generator Speed (RPM)	1800	1800	1800	1800	1800	1800
<b>Receptacles</b>						
NEMA 5-20R	1	1	1	1	1 (9)	1 (9)
NEMA 6-50R	1	1	1	1	1 (9)	1 (9)
Full Power Plug	Included	Included	Included	Included	Included	Breaker (7)
Tractor HP (4)	80	90	150	150	210	290
PTO Input Speed	540 (8)	540 (8)	1000	1000	1000	1000
Code G Motor Starting (5)	25	25	40	40	40	70
Generator Type (6)	RFL(C)	FRB	RFB	RFB	RFL(X)	RFL(X)
Dimensions (LxWxH)	38x23x20	38x23x20	44x23x20	44x23x20	47x21x30	47x27x30
Ship Weight (lbs)	558	558	738	738	1234	1540
Warranty	3 Years	3 Years	3 Years	3 Years	1 Year	1 Year

Notes: (1) Continuous rating per NEMA MG1-22.40 standards. (2) 0.8 power factor. (3) Unity (1.0) power factor. (4) Recommended tractor hp for full rated output. Each 2 hp of tractor power equals approximately 1 kW of electric power output. (5) NEMA Code G capacitor start motor. (6) RFL(C) is Rotating Field Brushless, capacitor excitation; RFL(X) is Rotating Field Brushless, external regulation; RAB is Rotating Armature Brush Type; RFB is Rotating Field Brush Type. (7) Full power connection is made directly to the main line circuit breaker. (8) Optional factory installed 1000 RPM gearbox is available. (9) No receptacles on 480V machines.

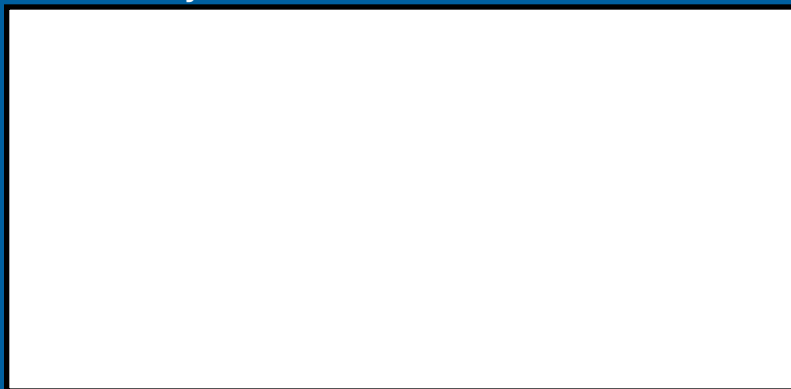


Tumbling Bar Specifications	Generator PTO Power Rating	Operating Speed	Generator End Connection	Tractor End Connection	Shaft Power Rating
	15 kW	515	1 3/8"-6 Spline	1 3/8"-6 Spline	43
	25 kW	540	1 1/8"-Keyed	1 3/8"-6 Spline	50
	35-50 kW	540	1 3/8"-6 Spline	1 3/8"-6 Spline	90
	25-75 kW (1)	1000	1 3/8"-6 Spline	1 3/8"-21 Spline	135
	85 kW (Option 1)	1000	1 3/4"-20 Spline	1 3/4"-20 Spline	167
	85 kW (Option 2)	1000	1 3/4"-20 Spline	1 3/8"-21 Spline	167
	100-120 kW (Option 1)	1000	1 3/4"-20 Spline	1 3/4"-20 Spline	167
	100-120 kW (Option 2)	1000	1 3/4"-20 Spline	1 3/8"-21 Spline	167
	145-165 kW	1000	1 3/4"-20 Spline	1 3/4"-20 Spline	257
Notes: (1) Requires spline adaptor for use with 25FPTOC-3					



All WINCO and WINPOWER generators are designed and manufactured in a 200,000-square-foot facility located in Le Center, Minnesota.

**Presented By:**



**WINCO/WINPOWER**  
**225 S. Cordova Ave.**  
**Le Center, MN 56057**

**WINCO INC**

**Sales:** 800-733-2112  
**Service:** 507-357-6831  
**Fax:** 507-357-4857  
[www.wincogen.com](http://www.wincogen.com)

**WINPOWER**

**Sales:** 800-327-1301  
**Service:** 507-357-6707  
**Fax:** 507-357-4857  
[www.winpowerinc.com](http://www.winpowerinc.com)